

IN THE SPECIFICATION

Please amend the paragraph starting at page 6, line 16 as follows:

The piston preferably has a length of 5 mm to 10 cm, preferably from 1 cm to 7.5 cm. The ~~cross~~ section-diameter of the piston is preferably 0.25 to 4 mm, more preferably 0.5 to 3 mm and most preferably 0.75 to 2.25 mm.

Please amend the paragraph starting at page 12, line 3 as follows:

In a piston pump for metering very small volumes a quantity of liquid of about 15 ~~L~~-microliter has to be conveyed very precisely in a single piston stroke. This must also be the case even when the device is actuated for the first time after a period of idleness. To ensure this, no air must enter the pump during the period of idleness as otherwise the metering can longer be carried out with the desired precision.

Please add the following paragraphs starting on page 12, line 23:

The piston may also be operated by means of a spring 30, e.g. a helical spring, which is mechanically or electrically biased and connected to the piston via a flange. Details may be found from the prior art relating to medical devices, particularly the fields of transdermal therapeutic systems, atomisers, propellant-free inhalers, needleless injectors, etc.

The piston may be operated for example by coupling to a piezoelectric element 32. This coupling may be direct, via one or more lever arms or a diaphragm. Preferably, the piston is moved directly by the piezoelectric element 32. The piezoelectric element 32 itself is actuated by a microchip, for example, in such a case.

Please amend the title by deleting same and replacing the title with the following:

--PISTON PUMPING SYSTEM HAVING O-RING SEAL PROPERTIES--